

AMENDMENTS TO THE CLAIMS

(IN FORMAT COMPLIANT WITH THE REVISED 37 CFR 1.121)

1. (CURRENTLY AMENDED) A method for interconnecting a plurality of dies, comprising the steps of:

(A) receiving a plurality of interconnect requirements for said dies, said interconnect requirements comprising a priority for each of a plurality of nets;

(B) calculating a position and an angle for one of said dies relative to a substrate mounting said dies in response to said interconnect requirements; and

(C) routing ~~a plurality of~~ said nets among said dies and a plurality of substrate pads on said substrate, said substrate pads defining external connections.

2. (CURRENTLY AMENDED) The method according to claim ~~1~~ 21, wherein said interconnect requirements comprise a priority for each of said nets.

3. (CURRENTLY AMENDED) The method according to claim ~~2~~ 1, wherein step (C) further comprises the sub-step of routing said nets one at a time in descending order of said priority.

4. (CURRENTLY AMENDED) The method according to claim 3, further comprising the step of ~~changing~~ rotating one of said dies ~~angles~~ in response to a target net of said nets having a shortest possible length requirement of said interconnect requirements.

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5. (CURRENTLY AMENDED) The method according to claim 4, further comprising the step of ~~changing~~ moving one of said dies ~~positions~~ in response to said target net having ~~said a~~ shortest possible length requirement.

6. (CURRENTLY AMENDED) The method according to claim 1, further comprising the step of ~~changing~~ rotating one of said dies ~~angles~~ in response to a target net of said nets failing to meet at least one of said interconnect requirements.

7. (CURRENTLY AMENDED) The method according to claim 6, further comprising the step of ~~changing~~ moving one of said dies ~~positions~~ in response to said target net failing to meet at least one of said interconnect requirements.

8. (ORIGINAL) The method according to claim 1, wherein a trace group comprises at least two nets of said nets routed together.

9. (ORIGINAL) The method according to claim 8, wherein said interconnect requirements comprise a maximum delay variation among said at least two nets of said trace group.

10. (ORIGINAL) The method according to claim 1, wherein said interconnect requirements comprise at least one delay from a group of delays consisting of a shortest possible delay, a maximum delay, a range of delays, and a ratsnest delay.

11. (CURRENTLY AMENDED) A storage medium for use in a computer for interconnecting a plurality of dies, the storage medium recording a computer program that is readable and executable by the computer, the computer program comprising the steps of:

5 (A) receiving a plurality of interconnect requirements for said dies;

(B) calculating a position and an angle for one of said dies relative to a substrate mounting said dies in response to said interconnect requirements; and

10 (C) routing a plurality of nets among said dies and a plurality of substrate pads on said substrate, said substrate pads defining external connections.

12. (ORIGINAL) The storage medium according to claim 11, wherein said interconnect requirements comprise a priority for each of said nets.

13. (ORIGINAL) The storage medium according to claim 12, wherein step (C) further comprises the sub-step of routing said nets one at a time in descending order of said priority.

14. (CURRENTLY AMENDED) The storage medium according to claim 13, further comprising the step of ~~changing~~ rotating one of said dies ~~angles~~ in response to a target net of said nets having a shortest possible length requirement of said interconnect requirements.

15. (CURRENTLY AMENDED) The storage medium according to claim ~~14~~ 13, further comprising the step of ~~changing~~ moving one of said dies ~~positions~~ in response to said target net having ~~said a~~ shortest possible length requirement.

16. (CURRENTLY AMENDED) The storage medium according to claim 11, further comprising the step of ~~changing~~ rotating one of said dies ~~angles~~ in response to a target net of said nets failing to meet at least one of said interconnect requirements.

17. (CURRENTLY AMENDED) The storage medium according to claim ~~16~~ 11, further comprising the step of ~~changing~~ moving one of said dies ~~positions~~ in response to said target net failing to meet at least one of said interconnect requirements.

18. (ORIGINAL) The storage medium according to claim 11, wherein a trace group comprises at least two nets of said nets routed together.

19. (ORIGINAL) The storage medium according to claim 18, wherein said interconnect requirements comprise a maximum delay variation among said at least two nets of said trace group.

20. (CURRENTLY AMENDED) An apparatus comprising:  
means for receiving a plurality of interconnect requirements for a plurality of dies;

means for calculating a position and an angle for one of said dies relative to a substrate mounting said dies in response to said interconnect requirements; and

means for routing a plurality of nets among said dies and a plurality of substrate pads on said substrate, said substrate pads defining external connections.

21. (NEW) A method for interconnecting a plurality of dies, comprising the steps of:

(A) receiving a plurality of interconnect requirements for said dies;

5 (B) calculating a position and an angle for one of said dies relative to a substrate mounting said dies in response to said interconnect requirements;

10 *K3* (C) routing a plurality of nets among said dies and a plurality of substrate pads on said substrate, said substrate pads defining external connections; and

(D) rotating one of said dies in response to a target net of said nets failing to meet at least one of said interconnect requirements.

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